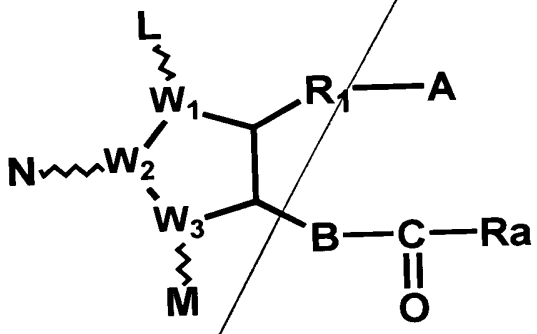
What is claimed is

1. A method for treatment of a subject having a disease or condition associated with apoptosis, which comprises administering an effective amount of a 15-keto-prostaglandin compound represented by the following formula (I):



(I)

wherein W_1, W_2 and W_3 are carbon or oxygen atoms;

L, M and N are hydrogen, hydroxy, halogen, lower alkyl, lower alkoxy, hydroxy(lower)alkyl or oxo, wherein at least one of L and M is a group other than hydrogen, and the five-membered ring may have one or more double bond(s);

A is $-CH_2OH$, $-COCH_2OH$, -COOH or its functional derivative;

B is $-CH_2-CH_2-$, -CH=CH- or $-C\equiv C-$;

R_1 is a divalent saturated or unsaturated lower-medium aliphatic hydrocarbon residue, which is unsubstituted or substituted by halogen, alkyl, hydroxy, oxo, aryl or heterocyclic group; and

Ra is a saturated or unsaturated lower-medium aliphatic hydrocarbon residue, which is unsubstituted or substituted by halogen, oxo, hydroxy, lower alkyl, lower alkoxy, lower alkanoyloxy, cyclo(lower)alkyl, cyclo(lower)alkyloxy, aryl, aryloxy, heterocyclic group or heterocyclic-oxy group; cyclo(lower)alkyl;

cyclo(lower)alkyloxy; aryl; aryloxy; heterocyclic group; or heterocyclic-oxy group to the subject.

2. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 13,14-dihydro-15-keto-prostaglandin compound.

3. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 15-keto-16-mono or dihalogen-prostaglandin compound.

4. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 13,14-dihydro-15-keto-16-mono or di-halogen-prostaglandin compound.

5. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 15-keto-16-mono or di-fluoro-prostaglandin compound.

6. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 13,14-dihydro-15-keto-16-mono or di-fluoro-prostaglandin compound.

7. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 15-keto-20-lower alkyl-prostaglandin compound.

8. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 15-keto-20-ethyl-prostaglandin compound.

9. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 2-decarboxy-2-(2-carboxy lower alkyl)-15-keto-prostaglandin compound.

10. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 2-decarboxy-2-(2-carboxyethyl)-15-keto-prostaglandin compound.

11. The method of claim 1, wherein the 15-keto-prostaglandin

compound is a 2-decarboxy-2-(2-carboxyethyl)-13,14-dihydro-15-keto-16-mono or di-fluoro prostaglandin compound.

12. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 2-decarboxy-2-(2-carboxyethyl)-13,14-dihydro-15-keto-16-mono or di-fluoro-20-ethyl-prostaglandin compound.

13. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 2-decarboxy-2-(2-carboxyethyl)-13,14-dihydro-15-keto-16,16-difluoro-20-ethyl-prostaglandin compound.

14. The method of claim 1, wherein the 15-keto-prostaglandin compound is a 15-keto-prostaglandin E compound.

15. The method of claim 1, wherein the 15-keto-prostaglandin compound is 2-decarboxy-2-(2-carboxyethyl)-13,14-dihydro-15-keto-16,16-difluoro-20-ethyl-prostaglandin E_1 isopropyl ester.

16. The method of claim 1, wherein the disease or condition associated with apoptosis is an eye disorder caused by light.

17. The method of claim 1, which comprises administering ophthalmically a composition comprising a 15-keto-prostaglandin compound formulated in a dosage form suitable for ophthalmic administration.

18. The method of claim 17, wherein said composition is formulated as eye drops.